

WHAT IS CLAIMED IS:

1. A device for applying a foamed hot melt adhesive having a first compression process including a first gear pump and a second compression process including a second gear pump, supplying a hot melt adhesive with application of pressure in the first compression processing, mixing a gas with the a hot melt adhesive in the second compression process, and discharging the foamed hot melt adhesive from a discharge opening,

wherein the first gear pump of the first compression process and the second gear pump of the second compression process are driven by drive mechanisms independently from each other and rotation frequencies of the first gear pump and the second gear pump, respectively, are set independently and arbitrarily

2. A device for applying a foamed hot melt adhesive having a first compression process including a first gear pump and a second compression process including a second gear pump, supplying a hot melt adhesive with application of pressure in the first compression processing, mixing a gas with the a hot melt adhesive in the second compression process, and discharging the foamed hot melt adhesive from a discharge opening,

wherein the first gear pump of the first compression process and the second gear pump of the second compression process are driven by drive mechanisms independently from each other and rotation frequencies of the first gear pump and the second gear pump,

respectively, are set independently and arbitrarily, and detecting a pressure of a liquid being pressure fed in the second compression process, the rotation frequencies of the first gear pump and the second gear pump, respectively, are sequentially controlled so as to automatically control an amount of the gas to be mixed.

3. A device for applying a foamed hot melt adhesive having a first compression process including a first gear pump and a second compression process including a second gear pump, supplying a hot melt adhesive with application of pressure in the first compression processing, mixing a gas with the a hot melt adhesive in the second compression process, and discharging the foamed hot melt adhesive from a discharge opening,

wherein the first gear pump of the first compression process and the second gear pump of the second compression process are driven by drive mechanisms independently from each other and rotation frequencies of the first gear pump and the second gear pump, respectively, are set independently and arbitrarily, and

a gas suction opening is provided between the first gear pump and the second gear pump in the second compression process and a mixer is provided between the gas suction opening and the second gear pump so as to enhance mixture and dispersion between the gas and a liquid.

4. A device for applying a foamed hot melt adhesive having a first compression process including a first gear pump and a second compression process including a second gear pump, supplying a hot melt adhesive with application of pressure in the first compression processing, mixing a gas with the a hot melt adhesive in the second compression process, and discharging the foamed hot melt adhesive from a discharge opening,

wherein the first gear pump of the first compression process and the second gear pump of the second compression process are driven by drive mechanisms independently from each other and rotation frequencies of the first gear pump and the second gear pump, respectively, are set independently and arbitrarily, and

a gas suction opening is provided between the first gear pump and the second gear pump in the second compression process and a mixer is provided between the gas suction opening and the second gear pump so as to enhance mixture and dispersion between the gas and a liquid, and

an end of a return circuit in the second compression process is located at a downstream of the first gear pump so as to prevent air bubbles from returning to a tank.

5. A device for applying a foamed hot melt adhesive having a first compression process including a first gear pump and a second compression process including a second gear pump, supplying a hot melt adhesive with application of pressure in the first compression

processing, mixing a gas with the a hot melt adhesive in the second compression process, and discharging the foamed hot melt adhesive from a discharge opening,

wherein the first gear pump of the first compression process and the second gear pump of the second compression process are driven by drive mechanisms independently from each other and rotation frequencies of the first gear pump and the second gear pump, respectively, are set independently and arbitrarily, and

a gas suction opening is provided between the first gear pump and the second gear pump in the second compression process and a mixer is provided between the gas suction opening and the second gear pump so as to enhance mixture and dispersion between the gas and a liquid, and

a gun installs a valve mechanism and a restriction valve therein so as to produce a single bubble.

6. A method for selectively applying a foamed hot melt adhesive and a solid hot melt adhesive, using a device for applying a foam hot melt adhesive having a first compression process including a first gear pump and a second compression process including a second gear pump, supplying a hot melt adhesive with application of pressure in the first compression processing, mixing a gas with the a hot melt adhesive in the second compression process, and discharging the foamed hot melt adhesive from a discharge opening, the first gear pump of the first compression process and the second gear pump

of the second compression process being driven by drive mechanisms independently from each other and rotation frequencies of the first gear pump being the second gear pump, respectively, are set independently and arbitrarily,

wherein the ratio of discharge between the first gear pump and the second gear pump is automatically controlled to be set at 1/1 to apply the solid hot melt adhesive,

the ratio of discharge between the first gear pump and the second gear pump is automatically controlled to be set at a value greater than 1/1 to apply the foamed hot melt adhesive, and

application of the foamed hot melt adhesive and that of the solid hot melt adhesive can be selectively performed by the device for applying the foamed hot melt adhesive.